SEQUENCE LISTING

```
<110> Friddle, Carl Johan
Gerhardt, Brenda
Hu, Yi
<120> Novel Human GABA Tra
```

<120> Novel Human GABA Transporter Protein and Polynucleotides Encoding the Same

```
<130> LEX-0228-USA
```

<150> US 60/230,178 <151> 2000-09-01

<160> 3

<170> FastSEQ for Windows Version 4.0

<210> 1 <211> 1578 <212> DNA <213> homo sapiens

<400> 1

```
atggccacct tgctccgcag caagctgtcc aacgtggcca cgtccgtgtc caacaagtcc
                                                                      60
 caggccaaga tgagcggcat gttcgccagg atgggttttc aggcggccac ggatgaggag
                                                                     120
 geggtggget tegegeattg egaegaeete gaetttgage aeegeeaggg eetgeagatg
                                                                     180
 gacateetga aageegaggg agageeetge ggggaegagg gegetgaage geeegtegag
                                                                     240
 ggagacatcc attatcagcg aggcagcgga gctcctctgc cgccctccgg ctccaaggac
                                                                     300
 caggtgggag gtggtggcga attcgggggc cacgacaagc ccaaaatcac ggcgtgggag
                                                                     360
 gcaggctgga acgtgaccaa cgccatccag ggcatgttcg tgctgggcct accctacgcc
                                                                     420
 atcctgcacg gcggctacct ggggttgttt ctcatcatct tcgccgccgt tgtgtgctgc
                                                                     480
 tacaccggca agatcctcat cgcgtgcctg tacgaggaga atgaagacgg cgaggtggtg
                                                                     540
 cgcgtgcggg actcgtacgt ggccatagcc aacgcctgct gcgccccgcg cttcccaacg
                                                                     600
ctgggcggcc gagtggtgaa cgtagcgcag atcatcgagc tggtgatgac gtgcatcctg
                                                                     660
tacgtggtgg tgagtggcaa cctcatgtac aacagcttcc cggggctgcc cgtgtcgcag
                                                                     720
aagtcctggt ccattatcgc cacggccgtg ctgctgcctt gcgccttcct taagaacctc
                                                                     780
aaggccgtgt ccaagttcag tctgctgtgc actctggccc acttcgtcat caatatcctg
                                                                     840
gtcatagcct actgtctatc gcgggcgcgc gactgggcct gggagaaggt caagttctac
                                                                     900
atcgacgtca agaagttccc catctccatt ggcatcatcg tgttcagcta cacgtctcag
                                                                     960
atcttcctgc cttcgctgga gggcaatatg cagcagccca gcgagttcca ctgcatgatg
                                                                    1020
aactggacgc acategcage etgegtgete aagggeetet tegegetegt egeetacete
                                                                    1080
acctgggccg acgagaccaa ggaggtcatc acggataacc tgcccggctc catccgcgcc
                                                                   1140
gtggtcaaca tctttctggt ggccaaggcg ctgttgtcct atcctctgcc attctttgcc
                                                                   1200
gctgtcgagg tgctggagaa gtcgctcttc caggaaggca gccgcgcctt tttcccggcc
                                                                   1260
1320
gtcttcacgc tgctcatggc catttatgtg ccgcacttcg cgctgctcat gggcctcacc
                                                                   1380
ggcagcetca egggegeegg cetetgttte ttgetgeeca geetetttea eetgegeetg
                                                                   1440
ctctggcgca agctgctgtg gcaccaagtc ttcttcgacg tcgccatctt cgtcatcggc
                                                                   1500
ggcatctgca gcgtgtccgg cttcgtgcac tccctcgagg gcctcatcga agcctaccga
                                                                   1560
accaacgcgg aggactag
                                                                   1578
```

<210> 2

<211> 525

<212> PRT

<213> homo sapiens

<400> 2 Met Ala Thr Leu Leu Arg Ser Lys Leu Ser Asn Val Ala Thr Ser Val Ser Asn Lys Ser Gln Ala Lys Met Ser Gly Met Phe Ala Arg Met Gly 25 Phe Gln Ala Ala Thr Asp Glu Glu Ala Val Gly Phe Ala His Cys Asp 40 Asp Leu Asp Phe Glu His Arg Gln Gly Leu Gln Met Asp Ile Leu Lys Ala Glu Gly Glu Pro Cys Gly Asp Glu Gly Ala Glu Ala Pro Val Glu 75 Gly Asp Ile His Tyr Gln Arg Gly Ser Gly Ala Pro Leu Pro Pro Ser 90 Gly Ser Lys Asp Gln Val Gly Gly Gly Glu Phe Gly Gly His Asp 105 Lys Pro Lys Ile Thr Ala Trp Glu Ala Gly Trp Asn Val Thr Asn Ala 120 Ile Gln Gly Met Phe Val Leu Gly Leu Pro Tyr Ala Ile Leu His Gly 135 140 Gly Tyr Leu Gly Leu Phe Leu Ile Ile Phe Ala Ala Val Val Cys Cys 150 155 Tyr Thr Gly Lys Ile Leu Ile Ala Cys Leu Tyr Glu Glu Asn Glu Asp 165 170 Gly Glu Val Val Arg Val Arg Asp Ser Tyr Val Ala Ile Ala Asn Ala 180 185 Cys Cys Ala Pro Arg Phe Pro Thr Leu Gly Gly Arg Val Val Asn Val 200 Ala Gln Ile Ile Glu Leu Val Met Thr Cys Ile Leu Tyr Val Val Val 215 Ser Gly Asn Leu Met Tyr Asn Ser Phe Pro Gly Leu Pro Val Ser Gln 230 235 Lys Ser Trp Ser Ile Ile Ala Thr Ala Val Leu Leu Pro Cys Ala Phe 250 Leu Lys Asn Leu Lys Ala Val Ser Lys Phe Ser Leu Leu Cys Thr Leu 265 Ala His Phe Val Ile Asn Ile Leu Val Ile Ala Tyr Cys Leu Ser Arg 280 Ala Arg Asp Trp Ala Trp Glu Lys Val Lys Phe Tyr .Ile Asp Val Lys 295 300 Lys Phe Pro Ile Ser Ile Gly Ile Ile Val Phe Ser Tyr Thr Ser Gln 310 315 Ile Phe Leu Pro Ser Leu Glu Gly Asn Met Gln Gln Pro Ser Glu Phe 325 330 His Cys Met Met Asn Trp Thr His Ile Ala Ala Cys Val Leu Lys Gly 345 Leu Phe Ala Leu Val Ala Tyr Leu Thr Trp Ala Asp Glu Thr Lys Glu 360 Val Ile Thr Asp Asn Leu Pro Gly Ser Ile Arg Ala Val Val Asn Ile 375 380 Phe Leu Val Ala Lys Ala Leu Leu Ser Tyr Pro Leu Pro Phe Phe Ala 390 395 Ala Val Glu Val Leu Glu Lys Ser Leu Phe Gln Glu Gly Ser Arg Ala 405 Phe Phe Pro Ala Cys Tyr Ser Gly Asp Gly Arg Leu Lys Ser Trp Gly

```
420
                                 425
                                                     430
  Leu Thr Leu Arg Cys Ala Leu Val Val Phe Thr Leu Leu Met Ala Ile
                             440
                                                 445
 Tyr Val Pro His Phe Ala Leu Leu Met Gly Leu Thr Gly Ser Leu Thr
                                             460
 Gly Ala Gly Leu Cys Phe Leu Leu Pro Ser Leu Phe His Leu Arg Leu
                     470
                                         475
 Leu Trp Arg Lys Leu Leu Trp His Gln Val Phe Phe Asp Val Ala Ile
                 485
                                     490
 Phe Val Ile Gly Gly Ile Cys Ser Val Ser Gly Phe Val His Ser Leu
             500
                                 505
 Glu Gly Leu Ile Glu Ala Tyr Arg Thr Asn Ala Glu Asp
         515
                             520
 <210> 3
 <211> 2261
 <212> DNA
 <213> homo sapiens
 <400> 3
 tetecaatee eccaeeeeg caeegeetga tteegagggg egggagegea ttgggetgeg
                                                                       60
 cacgggtggg ggcgccgcgc cagcttcgcg tagctgctct gacgccgctg ccgccgccgc
                                                                      120
 egeegeegee geeeteegea geeeageteg egeeeegegg cageteegea gtgeaetage
                                                                      180
 caccaccgcc gccgccgccg ctccgccaga cctgctgcca gcttgcccgg tccagccctg
                                                                      240
 agagagcctc gaacgccagc tgcgagggtc atgagccaga gagccccggg gcgccgcgcg
                                                                      300
 gagagcaagc ggagatagcg actttgcgcc ccccagccct cgccttcttg catcgcgttc
                                                                      360
 cccgcatcct cgggtccttc tgtcctttcc gctgtcccca ccgccgccat ggccaccttg
                                                                      420
 ctccgcagca agctgtccaa cgtggccacg tccgtgtcca acaagtccca ggccaagatg
                                                                      480
 agcggcatgt tcgccaggat gggttttcag gcggccacgg atgaggaggc ggtgggcttc
                                                                      540
 gcgcattgcg acgacctcga ctttgagcac cgccagggcc tgcagatgga catcctgaaa
                                                                      600
 gccgagggag agccctgcgg ggacgagggc gctgaagcgc ccgtcgaggg agacatccat
                                                                      660
 tatcagcgag gcagcggagc teetetgeeg eeeteegget ccaaggacca ggtgggaggt
                                                                      720
ggtggcgaat tcgggggcca cgacaagccc aaaatcacgg cgtgggaggc aggctggaac
                                                                      780
gtgaccaacg ccatccaggg catgttcgtg ctgggcctac cctacgccat cctgcacggc
                                                                      840
ggctacctgg ggttgtttct catcatcttc gccgccgttg tgtgctgcta caccggcaag
                                                                      900
atcctcatcg cgtgcctgta cgaggagaat gaagacggcg aggtggtgcg cgtgcgggac
                                                                      960
tcgtacgtgg ccatagccaa cgcctgctgc gccccgcgct tcccaacgct gggcggccga
                                                                     1020
gtggtgaacg tagcgcagat catcgagctg gtgatgacgt gcatcctgta cgtggtggtg
                                                                     1080
agtggcaacc tcatgtacaa cagcttcccg gggctgcccg tgtcgcagaa gtcctggtcc
                                                                     1140
attategeca eggeegtget getgeettge geetteetta agaaceteaa ggeegtgtee
                                                                     1200
aagttcagtc tgctgtgcac tctggcccac ttcgtcatca atatcctggt catagcctac
                                                                     1260
tgtctatcgc gggcgcgcga ctgggcctgg gagaaggtca agttctacat cgacgtcaag
                                                                     1320
aagttcccca tctccattgg catcatcgtg ttcagctaca cgtctcagat cttcctgcct
                                                                     1380
tcgctggagg gcaatatgca gcagcccagc gagttccact gcatgatgaa ctggacgcac
                                                                     1440
ategeagect gegtgeteaa gggeetette gegetegteg cetaceteae etgggeegae
                                                                     1500
gagaccaagg aggtcatcac ggataacctg cccggctcca tccgcgccgt ggtcaacatc
                                                                     1560
tttctggtgg ccaaggcgct gttgtcctat cctctgccat tctttgccgc tgtcgaggtg
                                                                    1620
ctggagaagt cgctcttcca ggaaggcagc cgcgcctttt tcccggcctg ctacagcggc
                                                                    1680
1740
ctcatggcca tttatgtgcc gcacttcgcg ctgctcatgg gcctcaccgg cagcctcacg
                                                                    1800
ggcgccggcc tctgtttctt gctgcccagc ctctttcacc tgcgcctgct ctggcgcaag
                                                                    1860
ctgctgtggc accaagtctt cttcgacgtc gccatcttcg tcatcggcgg catctgcagc
                                                                    1920
gtgtccggct tcgtgcactc cctcgagggc ctcatcgaag cctaccgaac caacgcggag
                                                                    1980
gactagggcg caagggcgag cccccgccgc gcttctgcgc tctctccctt ctcccctcac
                                                                    2040
cccgccccca ccagcccagt gcgccctgcc gccgcgcttg ggaggccaag ctttaaacat
```

ctctggttcc tagtttctga ttattcgggg atggggggga tgggagggga cagggattca

2100

2160



cgatccatcg cgtctgcgtt tctgttgtcc tttcttttcc acaacaccct ggttttgggg ggaggcgggg tgcatttgcg ggcagggttc tctgtccttc c

2220

2261